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10/552,841	10/11/2005	Masahiro Fukuzawa	10921.360USWO	2257

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EXAMINER	
EASTWOOD, DAVID C	
ART UNIT	PAPER NUMBER
3731	

MAIL DATE	DELIVERY MODE
12/04/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/552,841	FUKUZAWA ET AL.	
	Examiner	Art Unit	
	DAVID EASTWOOD	3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 October 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 October 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Receipt is acknowledged of applicant's amendment filed 10/08/2009. Claims 1-27 are pending and an action on the merits is as follows.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2, 6-10, 12-19, 21-22 and 24-26 are rejected under 35 U.S.C. 102(b) as being anticipated by List (US 2003/0028126).

Regarding Claims 1-2, 6-10, 12-19, 21-22 and 24-26, List discloses a lancing apparatus for moving a lancing element in a lancing direction from a wait position to a lancing position to lance an intended portion with the lancing element, the lancing apparatus comprising: a first member (20) which is reciprocally movable in the lancing direction and in a retreating direction which is opposite from the lancing direction; and a second member (4) which moves along with the lancing element and performs

reciprocal movement in the lancing direction and the retreating direction in accordance with the movement of the first member (Figure 3), movement conversion means (13,14,16,17,18) for (capable of) converting the reciprocal movement of the first member into the reciprocal movement of the second member in a manner such that a directional change of movement of the second member from the lancing direction to the retreating direction is performed during a one-way stroke of the first member (progression of figure 1 a-d), in one of the lancing direction and the retreating direction (as pin 16 travels in a orthogonal direction to the longitudinal axis of the device the second member is capable of retreating during one stroke of the first member compare fig. 1a with 1d), wherein the first member is reciprocally movable between a first fixed position (Figure 1a) and a second fixed position (Figure 1b); wherein the second member performs one cycle of reciprocal movement between a third fixed position (Figure 1b) and a fourth fixed position (Figure 1d) during when the first member performs one cycle of reciprocal movement between the first fixed position and the second fixed position, and the second member performs turning-back movement during when the first member moves straight between the first fixed position and the second fixed position (Progression of Figures 1 a-d), the movement conversion means comprises a third member (12) for connecting the first member (21) and the second member (4) to each other and converting movement of the first member into reciprocal movement of the second member (Figure 1 a-d), wherein the third member (12) includes a rotation shaft (18) whose position is fixed, a first movable portion (14) which engages the first member and is rotatable around the rotation shaft, and a second

movable portion (13) which engages the second member and is rotatable around the rotation shaft (Figure 1a), wherein the first member includes a first engagement portion (18) for allowing the rotation of the first movable portion; and wherein the second member includes a second engagement portion (17) for allowing the rotation of the second movable portion, wherein at least one of the first and the second engagement portions includes an inclined portion which is inclined with respect to a transverse direction extending perpendicularly to the lancing and the retreating directions (Figure 1a and c items 14 and 13), wherein the inclined portion has opposite ends each of which is connected to a straight portion (20) extending in the transverse direction (Figure 1b), wherein the inclined portion is provided in one of the first and the second engagement portions, where as the other of the first and the second engagement portions extends substantially in the transverse direction (Figure 1 a and c), wherein the first member is fixed while being biased when the lancing element is positioned at the wait position (Figure 1 b), and the first member is moved by the biasing force when released from the fixed state (Figure 1c), wherein the third member (12) is pivotable to convert the movement of the first member into the reciprocal movement of the second member by the pivotal movement (Figure 1 a-b), wherein the third member (12) includes a pivot shaft (16), a first movable portion (14) which engages the first member and is pivotable around the pivot shaft, and a second movable portion (13) which engages the second member and is pivotable around the pivot shaft, wherein the first member includes an engagement portion (portion of 18 which engages movable portion 14) for engaging the first movable portion (14) and controlling movement of the third

member in accordance with a position where the first movable portion engages, wherein the engagement portion includes an inclined portion for pivoting the third member to move the second member in the lancing direction, wherein the engagement portion includes an additional inclined portion for pivoting the third member to move the second member in the retreating direction(figure 1 a-d), wherein the engagement portion includes a straight portion (20) extending in the lancing and the retreating directions for moving the first member in the lancing direction or the retreating direction without moving the second and the third members in the lancing and the retreating directions (Figure 1 b), wherein the first movable portion includes a first (18) and a second pins (16); and wherein the engagement portion includes an inclined portion (14,13) with which the first pin engages in moving the second member in the lancing direction and with which the second pin engages in moving the second member in the retreating direction (Figure 1 a-d), wherein the first member includes an additional engagement portion (34) with which the second pin selectively engages when the first member moves in the retreating direction (Figure 3), wherein the first member is movable in a crossing direction crossing the lancing and the retreating directions to pivot the third member to move the second member in the retreating direction (Figure 1 a-d), further comprising an actuating member (35) for moving the first member; wherein each of the first member and the actuating member includes an inclined surface (37), and the first member moves in the crossing direction by moving the inclined surface of the actuating member along the inclined surface of the first member (Figure 3), further comprising a guide (11) which moves along with the first member in the lancing direction or the

retreating direction, and a resilient member (16) for connecting the guide and the first member to each other and biasing the first member in the crossing direction crossing the lancing and the retreating directions (Figure 1a).

3. Claims 1-4, 6-11, 14-18, 20, 24 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Garthe et al. (US 2003/0225429).

Regarding Claim 1-4, 6-11, 14-18, 20, 24 and 27,Garthe discloses a first member (60) which is reciprocally movable in the lancing direction and in a retreating direction which is opposite from the lancing direction; and a second member (40) which moves along with the lancing element and performs reciprocal movement in the lancing direction and the retreating direction in accordance with the movement of the first member (Figure 4a), a movement conversion means (51) for (capable of) converting the reciprocal movement of the first member into the reciprocal movement of the second member (as 51 rotates) in a manner such that a directional change of movement of the second member from the lancing direction to the retreating direction is performed during a one-way stroke of the first member, in one of the lancing direction and the retreating direction, including a first link arm (61) connected to the first member (60) and a second link arm (41) connected to the first link arm (via conversion means 51) at a fixed angle (fig. 4a) and to the second member, the angle between the first and second link arms being invariable regardless of positions of the first and second members (fig. 4a), the first member is reciprocally movable between a first fixed position (Figure 4a) and a second fixed position (Figure 4b); wherein the second member performs one cycle of

reciprocal movement between a third fixed position (Figure 4a) and a fourth fixed position (Figure 4b) during when the first member performs one cycle of reciprocal movement between the first fixed position and the second fixed position, and the second member performs turning-back movement during when the first member moves straight between the first fixed position and the second fixed position, the lancing element is positioned at the lancing position when the second member is positioned at the third fixed position, and the lancing element is positioned at the wait position when the second member is positioned at an intermediate region between the third fixed position and the fourth fixed position (Figure 4 progression from a-c), wherein the lancing element (30') moves from the wait position to the lancing position when the first member moves in the retreating direction (Figure 4c), the movement conversion means comprises a third member (portion of 51 between first and second member) for connecting the first member and the second member to each other and converting movement of the first member into reciprocal movement of the second member (Figure 4), wherein the third member includes a rotation shaft whose position is fixed, a first movable portion (61) which engages the first member and is rotatable around the rotation shaft, and a second movable portion (41) which engages the second member and is rotatable around the rotation shaft (Figure 4a), wherein the first member includes a first engagement portion (53) for allowing the rotation of the first movable portion; and wherein the second member includes a second engagement portion (52) for allowing the rotation of the second movable portion, wherein at least one of the first and the second engagement portions includes an inclined portion which is inclined with respect

to a transverse direction extending perpendicularly to the lancing and the retreating directions (Figure 4a), wherein the inclined portion has opposite ends each of which is connected to a straight portion (61, 41) extending in the transverse direction (Figure 4a),

wherein the first and the second movable portions, the movable portion which engages the inclined portion moves through the inclined portion when the lancing element moves from the wait position to the lancing position and moves through the straight portion when the lancing element moves from the lancing position in the retreating direction (Progression of Figure 4a-c), wherein the third member (51) is pivotable to convert the movement of the first member into the reciprocal movement of the second member by the pivotal movement (Figure 4c), wherein the third member includes a pivot shaft, a first movable portion (61) which engages the first member and is pivotable around the pivot shaft, and a second movable portion (41) which engages the second member and is pivotable around the pivot shaft (Figure 4a), wherein the first member includes an engagement portion (61) for engaging the first movable portion and controlling movement of the third member in accordance with a position where the first movable portion engages (Figure 4a), wherein the engagement portion includes an inclined portion (53) for pivoting the third member to move the second member in the lancing direction, wherein the engagement portion includes an additional inclined portion (53) for pivoting the third member to move the second member in the retreating direction (Figure 4c), further comprising a resilient member (41) for moving the second member in the retreating direction after the intended portion is lanced with the lancing element (Figure 4a path 52), wherein the first member (60,61) is movable in a crossing

direction crossing the lancing and the retreating directions to pivot the third member (51) to move the second member in the retreating direction (Figure 4a).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Garthe et al (US 2003/0225429).

Regarding to claim 5, Garthe et al discloses the claimed invention except for the motion of the first and second members is phase shifted by substantially 90 degrees. It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the pivot shaft such that the motion of the first and second members is phase shifted by substantially 90 degrees since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering

the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

7. Claim 23 rejected under 35 U.S.C. 103(a) as being unpatentable over List (US 2003/0028126).

Regarding Claim 23, List discloses the claimed invention except for the first pin is larger in diameter than the second pin and the additional engagement portion has a width smaller than the diameter of the first pin. It would have been an obvious matter of design choice to construct the first pin larger in diameter than the second pin and the additional engagement portion having a width smaller than the diameter of the first pin, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

Response to Arguments

8. Applicant's arguments filed 10/08/2009 have been fully considered but they are not persuasive. In regards to applicant's argument that both Garthe et al. and List fail to disclose a lancing apparatus that comprises a movement conversion means for converting the reciprocal movement of the first member into the reciprocal movement of the second member in a manner such that a directional change of movement of the second member from the lancing direction to the retreating direction is performed during a one-way stroke of the first member in one of the lancing direction and the retreating

direction, Examiner notes that this argument is addressed by a new grounds of rejection as set forth above.

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID EASTWOOD whose telephone number is (571)270-7135. The examiner can normally be reached on Monday thru Friday 9 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan Nguyen can be reached on (571)272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DAVID EASTWOOD/
Examiner, Art Unit 3731

/Anhtuan T. Nguyen/
Supervisory Patent Examiner, Art Unit 3731
12/02/09